

AMENDMENTS TO THE CLAIMS**Listing of Claims:**

Claims 1 – 10 (cancelled)

Claim 11 (new): An optical disc system for recording data to an optical disc, the optical disc system comprising:
an optical pickup unit for accessing data on the disc and producing a wobble signal;
a spindle motor for rotating the disc according to a control signal;
a phase locked loop (PLL) for extracting a carrier frequency of the wobble signal;
a clock synthesizer for producing a channel clock corresponding to a linear velocity, according to the wobble signal carrier frequency;
an encoding unit for encoding incoming data utilizing the channel clock, and then for producing a corresponding data signal for driving the optical pickup unit to record data to the optical disc;
whereby data recording does not need to be synchronized with the spindle motor operation.

Claim 12 (new): The optical disc system of claim 11, further comprising a preamplifier connected between the optical pickup unit and the PLL for amplifying the wobble signal output by the optical pickup unit.

Claim 13 (new): The optical disc system of claim 11, wherein the encoding unit further comprises:
a data encoder, for encoding data according to the channel clock;
a firmware, for transforming the encoded data into a pulse train; and
a laser driver, for controlling the optical pickup unit for recording to the optical disc.

Claim 14 (new): The optical disc system of claim 11 wherein the optical pickup unit is a laser pickup.

Claim 15 (new): The optical disc system of claim 11 being an optical disc recorder.

Claim 16 (new): The optical disc system of claim 11, wherein the spindle motor rotates the optical disc at constant angular velocity.

Claim 17 (new): A method for recording data to an optical disc, the method comprising:

providing an optical pickup unit for accessing a wobble signal from the optical disc;

providing a spindle motor for rotating the optical disc according to a control signal;

extracting a carrier frequency of the wobble signal;

utilizing the wobble signal carrier frequency to generate a channel clock corresponding to a linear velocity;

encoding incoming data utilizing the channel clock, and then producing a corresponding data signal for driving the optical pickup unit to record data to the optical disc;

whereby data recording does not need to be synchronized with the spindle motor operation.

Claim 18 (new): The method of claim 17, wherein the step of accessing the wobble signal from the optical disc further comprises amplifying the wobble signal.

Claim 19 (new): The method of claim 17 wherein the optical disc system is an optical disc recorder.

Claim 20 (new): The method of claim 17, wherein the step of rotating the optical disc rotates the optical disc at constant angular velocity.